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AS

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/423,746	11/15/99	FAGIOLINI	N 32232-152197

IM22/1018

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WASHINGTON DC 20005-3955

EXAMINER

VANOY, T

ART UNIT	PAPER NUMBER
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1754

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DATE MAILED: 10/18/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09-423,746

Applicant(s)

FAGIOLINI ET AL.

Examiner

VANDY

Group Art Unit

1754

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE THREE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 08 FEB 00 AND 15 NOV 99
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-10 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1-10 is/are rejected.
- ☒ Claim(s) 6 AND 9 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☒ The specification is objected to by the Examiner.
- ☒ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☒ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 4 AND 6
- ☒ Notice of Reference(s) Cited, PTO-892
- ☒ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

## DETAILED ACTION

### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Oath/Declaration*

The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because it makes no reference to the parent application, PCT/EP98/02828 filed 05/07/98, for this filing under 35 U.S.C. 371.

### *Specification*

- 5/a) In the amendment to pg. 1 before line 1 in the Amendment dated Feb. 8, 2000, the amendment does not set forth how this application is "related" to Belgium application no. 09700417.
- 5/b) The abstract is objected to because it does not give any examples of the contaminants that are removed out of the gas.
- nc) At the bottom of the abstract, "Figure 2 [sic]." should be deleted.
- md) The use of the trademark "Neutrec" set forth on pg. 1 ln. 23 has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

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Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

### ***Claim Objections***

Keep a) In claim 6 line 2, the term ("in accordance with" claim 1) does not require that the composition of claim 1 be used to purify the gas. The substitution of --of-- in lieu of "in accordance with" would resolve this issue.

The "in accordance with" phrase of claim 9 is objected to for the same reason.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

AL a) Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The specification, as originally filed, does not support the "magnesium hydrocarbonate" set forth in claim 2. The species set forth on pg. 2 lines 24-29 are not "magnesium hydrocarbonates".

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicants regard as their invention.

*Reef* a) In claim 1, the term "substantially" renders the claim indefinite because it is not clear from the specification what the metes and bounds are of "substantially". The comment set forth on pg. 4 lines 5-18 in the specification is noted, but raises the question of how much silica can the composition contains before it exerts a perceptible influence on the caking of the sodium bicarbonate.

b) In claim 4, the term "magnesium (hydr)oxide" is vague and indefinite because it is not known if the composition is required to be magnesium hydroxide or magnesium oxide. The comment set forth on pg. 2 lines 24-29 in the Applicants' specification is noted, but claim 1 is not limited to the magnesium oxide, magnesium hydroxide or mixtures thereof reported on pg. 2 lines 24-29.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

The person having "ordinary skill in the art" has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this application reasonably reflect this level of skill.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. The Applicants are advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the Examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over German Patent Doc. No. DE 41 00 645 A1 to Regler et al.

The English abstract of the Regler et al. application discloses a method for removing sulfur dioxide and hydrogen chloride out of a gas by contacting the gas with a reagent comprising:

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- (1) what appears to be at least one component to include  $\text{NaHCO}_3$ ;  $\text{MgO}$ ,  $\text{Mg}(\text{OH})_2$ , etc. . . , and
- (2) an activated charcoal or coke (especially lignite), so that (evidently) the reagent reacts with the sulfur dioxide and hydrogen chloride in the gas to produce a cleaned gas and reaction products, and then (evidently) the reaction products are filtered out of the gas.

The difference between the Applicants' claims and the Regler et al. application is that the Applicants' claims call for using a combination of the sodium bicarbonate and the magnesium compound (whereas, evidently, Regler et al. sets forth the use of a plurality of reagents with the same sodium bicarbonate and magnesium compound being among them), however it is submitted that this difference would have been obvious to one of ordinary skill in the art at the time the invention was made because the recitation of the same species in the Markush grouping of species in the English abstract of the Regler et al. application renders obvious the use of any combination of the recited species for the same purpose taught in the Regler et al. application.

The following references, which are indicative of the state of the art, are made of record: U. S. Patents 6,022,489; 4,859,438; 4,839,147; 4,681,045; 4,631,183; 4,631,178; 4,447,476; 4,048,288 and 3,995,005.

Any inquiry concerning this communication should be directed to Timothy C. Vanoy at telephone number 703-308-2540.

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Timothy Vanoy/tv   
Timothy Vanoy

17 Oct. 2000 Patent Examiner

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